

Section 18 Sevier River Basin INDUSTRIAL WATER

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Section Eighteen Sevier River Basin - State Water Plan

Industrial Water

Industries use a small but important part of the water resources.

18.1 INTRODUCTION

The generation of electrical power has become an important part of our society. In the Sevier River Basin, the current uses of water for power production are small but may increase in the future. Other industrial uses are for manufacturing and processing along with uses for culinary supplies. It is important to have suitable water available if industry is to come into the basin. This section discusses the present uses of water for industrial purposes and presents possibilities for future expansion.

18.2 SETTING

The total self-supplied industrial water use in the Sevier River Basin is 25,120 acre-feet annually. This includes 7,120 acre-feet of potable and 18,000 acre-feet of non-potable water. Industrial water use is primarily for power generation. The largest industrial water user is the coal-fired Intermountain Power Project (IPP) north of Delta. This power-generation facility uses surface water (non-potable) and potable water. This water was purchased from agricultural users and converted to industrial use. Power production capacity is currently rated at about 1.8 gigawatts (GW). This is about 60 percent of the original planned capacity. The balance was not built as the projected demand for energy did not materialize. The deregulation of electric power rates would also affect operations at the IPP plant.

Hydroelectric power plants have been built and are operating on 12 sites throughout the Sevier River Basin. Utah Power built one site with a capacity of 100 kw on Panguitch Creek but it is not operating. There are a total of 23 sites for small hydroelectric power plants if additional capacity is needed in the future. The

present and potential hydroelectric power plants are shown in Table 18-1.

Additional industrial users are discussed below. Most of these use water only for culinary purposes. However, in some cases, water is used for aesthetics such as lawns and landscaping. All of these uses are generally minor.

The existing mining industries divert varying amounts of water. Coal mining in Salina Canyon is a major activity. Mining of gypsum near Sigurd has been in operation since the 1940s. The gypsum is used to make wall board in a plant at the site. A new plant near Richfield produces high grade gypsum used in the production of food and pharmaceuticals. This product is shipped all over the nation. The cement manufacturing plant in Leamington Canyon is about 15 years old. A beryllium processing plant is located near Lynndyl. Sawmills are located at Gunnison, Vet-million, Ephraim and Fairview. There are a number of sand and gravel and ready-mix concrete plants in all areas of the basin. Industrial water use is shown in Table 18-2.

18.3 PROJECTED INDUSTRIAL WATER DEVELOPMENT

Industrial requirements for water are not expected to increase significantly. The only exception would be expansion of the Intermountain Power Project if there is an increased demand for power.

The coal mining operation in Salina Canyon has reserves for up to 60 years. Annual production may increase. This could also produce more water. It is anticipated the major increases in water use will come from light industry.

Table 18-1
HYDROELECTRIC POWER PLANTS

Table 18-1 HYDROELECTRIC POWER PLANTS					
Capacity					
Name/County	Stream	On Line	Installed (kw)	Potential (kw)	Owner.
<u>Garfield</u>					
Panguitch Lake	Panguitch Cr	No	0	148	W Panguitch Irr & Res Co
Panguitch	Panguitch Cr	No	100	NA	Utah Power
<u>Juab</u>					
Sevier Bridge	Sevier River	No	0	2,075	Delta Land & Water, et al
Levan	Cobble Cr	Yes	100	100	Levan
Levan	Pigeon Cr	Yes	200	200	Levan
<u>Millard</u>					
Lake Cr	Lake Cr	No	0	581	Otter Creek Res Co
Scipio Lake	Round Valley Cr	No	0	159	Piute Res & Irr Co
<u>Piute</u>					
Otter Cr	Otter Cr	No	0	655	
Piute	Sevier River	No	0	1,230	
<u>Sanpete</u>					
Ephraim No. 1 Ph	Ephraim Cr	Yes	150	150	City of Ephraim
Ephraim No. 2 Ph	Ephraim Cr	No	200	200	City of Ephraim
Fairview Upper	Cottonwood Cr	No	100	NA	Fairview City Corporation
Fountain Green	Big Spring	Yes	320	320	Utah Power
Gunnison	San Pitch Res	No	0	487	Gunnison Irr Co
Highland (9mi Res)	Nine Mile Cr	No	0	120	Highland Canal Co
Lwr Fairview Ph	Cottonwood Cr	No	100	100	Fairview City Corporation
Lwr Mt Pleasant	Pleasant Cr	Yes	150	754	Mt Pleasant City Corporation
Lwr Manti Ph	Manti Cr	Yes	120	1,109	Manti City L&P
Mt Springs Ph	Manti Cr	Yes	400	+25,000	Manti City L&P
Spring City	Oak Cr	Yes	380	380	Spring City Corporation
Uppr Mt Pleasant	Pleasant Cr	Yes	175	470	Mt Pleasant Corporation
<u>Sevier</u>					
Lower Monroe Ph	Monroe Cr	Yes	100	121	Monroe City Corporation
Three Creeks Res	Sevier River	No	0	120	Rocky Ford Canal Co
Upper Monroe Ph	Monroe Cr	Yes	125	10,660	Monroe City Corporation
Burrville Irr Co	Burr Cr	Yes	25	25	Burrville Irr Co

Table 18-2 INDUSTRIAL WATER USE				
County	Public System	Potable Self-Supplied	Non-potable Self-Supplied	Total
(acre-feet)				
Garfield	20	-0-	-0-	20
Juab	neg	90	-0-	90
Millard	260	6,390	18,000	24,650
Piute	50	-0-	-0-	50
Sanpete	460	530	-0-	990
Sevier	380	110	-0-	490
Total	1,170	7,120	18,000	26,290